

disk-shaped storage medium.

7. A data storage device comprising:

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a disk-shaped storage medium which has a data storage area and a servo area, the data storage area containing a plurality of data tracks which store user information, the servo area containing a plurality of servo tracks which store servo information for identifying positions of the plurality of data tracks;

a hybrid head slider which supports write and read heads, the write head writing user data on the data tracks of the disk-shaped storage medium, the read head reading the user data written on the data tracks; and

a rotary-type actuator which swings the hybrid head slider to position any one of the write and read heads at a target track of the disk-shaped storage medium, wherein a pitch of the servo tracks varies within a predetermined region in a radial direction of the disk-shaped storage medium.

8. The data storage device according to claim 7, wherein the pitch of the servo tracks varies with a standard pitch as a center, within the predetermined region in the radial direction of the disk-shaped storage medium.

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9. The data storage device according to claim 7, wherein a variation ratio of the pitch of the servo tracks is inverted from plus to minus at a boundary position in the radial direction of the disk-shaped storage medium, the position theretofore having the standard pitch.

10. A servo information writing method for writing a burst pattern as servo information on a disk-shaped storage medium of a data storage device which has a hybrid head including write and read heads, comprising the steps of:

calculating a read write offset value within a predetermined range on the disk-shaped storage medium, the read write offset value being a deviation amount between the write and read heads in a radial direction of the disk-shaped storage medium; and

writing the burst pattern so that the measured read write offset value is equivalent to an integer number N of servo tracks formed by the burst pattern.

11. The servo information writing method according to claim 10, wherein the burst pattern is written so that a pitch of the servo tracks varies at a predetermined variation ratio in the radial direction of the disk-shaped storage medium.